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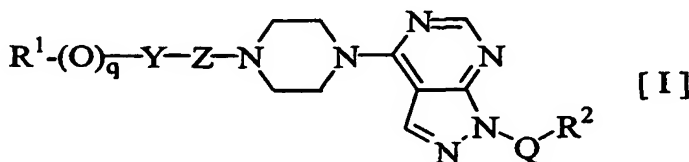
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[Continued on next page]

(54) Title: A PYRAZOLOPYRIMIDINE COMPOUND AND A PROCESS FOR PREPARING THE SAME



(57) Abstract: The present invention provides a novel pyrazolopyrimidine compound of the formula [I]: wherein R¹ is (A) a substituted aryl group, (B) an optionally substituted nitrogen-containing aliphatic heteromonocyclic group, (C) a substituted cyclo-lower alkyl group, (D) an optionally substituted amino group, or (E) a substituted heteroaryl group, R² is (a) an optionally substituted heteroaryl group or (b) an optionally substituted aryl group, Y is a single bond, a lower alkylene group or a lower alkenylene group, Z is a group of the formula: -CO-, -CH₂-, -S(=O)₂- or a group of the formula [II]: Q is a lower alkylene group, and q is an integer of 0 or 1 or a pharmaceutically acceptable salt thereof, which has a small conductance potassium channel (SK channel) blocking activity and is useful as a medicament and a process for preparing the same.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2004/000617

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D487/04 C07D519/00 A61K31/519 A61P1/00 A61P25/00
 //(C07D487/04,239:00,231:00),(C07D519/00,491:00,487:00)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 02/079189 A (TANABE SEIYAKU CO ; TAKAMURO IWA0 (JP); HOMMA KOICHI (JP); ISHIDA AKIH) 10 October 2002 (2002-10-10) cited in the application page 1, line 5 page 3, formula (I) page 22, formula (I-h) page 27, formulae page 39, line 10 - line 16 -----	1-22

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

14 July 2004

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27/07/2004

Name and mailing address of the ISA

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Hoepfner, W

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 19-22 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Although claims 19-22 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/000617

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 02079189 A	10-10-2002	EP 1373247 A2	02-01-2004
		WO 02079189 A2	10-10-2002
		JP 2003252871 A	10-09-2003
		US 2004106635 A1	03-06-2004
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